Amendment to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Cancelled)

2. (Cancelled)

3. (Currently Amended) A method of making an absorbent medium comprising the step of:

intermixing permeable substruction stranding and a mass of super-absorbent polymer particles into a meshwork for absorbing a predefined mass of liquid to a predefined dryness quality, each of said super-absorbent polymer particles having an affiliated centrifuge retention capacity value, said stranding having an affiliated absorption capacity value, said dryness quality denoted by a dryness quality value between 0.45 and 0.85 wherein 0.45 denotes an absorbent medium having a maximal dryness quality after absorption of said liquid mass and 0.85 an absorbent medium having a minimal dryness quality after absorption of said liquid mass, the cumulative mass of all said stranding being

$$m_{stranding} = (m_{liq} - \Phi\,(CRC)\,m_{sap}) / C_{stranding}$$

wherein

$m_{stranding}$ is a value denoting said cumulative mass of all said stranding,
m_{liq} is a value denoting said predefined mass of liquid to be absorbed,
Φ is said dryness quality value,
CRC is said centrifuge retention capacity value having units of mass of liquid per mass of dry super-absorbent polymer, as defined below,
m_{sap} is a value denoting the cumulative mass of all said super-absorbent polymer particles, and

$C_{stranding}$ is said absorption capacity value having units of mass of liquid per mass of dry stranding; and ~~The method of Claim 2~~ wherein, in said intermixing step, said super-absorbent polymer particles and stranding are intermixed to further achieve a predefined porous quality, said porous quality denoted by a porous quality value between 0.4 and 0.95 wherein 0.4 denotes an absorbent medium having a minimal porous quality after absorption of said liquid mass and 0.95 denotes an absorbent medium having a maximal porous quality after absorption of said liquid mass, and

wherein said centrifuge retention capacity value is determined according to

$$CRC = F\left[\left(\frac{1}{R_\phi}\right)^{\frac{1}{f_s^{1.83}+0.07}} - 1\right]^{0.54},$$

wherein

F is 40.58 with units of mass of liquid per mass of dry super-absorbent polymer,

R_ϕ is said porous quality value, and

f_s is a super-absorbent polymer mass fraction value according to

$$f_s = \frac{m_{sap}}{m_{sap} + m_{stranding}}$$

4. (Cancelled)

5. (Original) A method of making an absorbent medium having a permeable substruction meshwork of a mass of intertwined stranding, comprising the steps of:

defining a value denoting a mass of liquid to be absorbed by said medium;

defining a dryness quality value between 0.45 and 0.85 wherein 0.45 denotes a medium having a maximal dryness quality after absorption of said liquid mass and 0.85 denotes a medium having a minimal dryness quality after absorption of said liquid mass;

defining a porous quality value between 0.4 and 0.95 wherein 0.4 denotes a medium having a minimal porous quality after absorption of said liquid mass and 0.95 denotes a medium having a maximal porous quality after absorption of said liquid mass;

defining a super-absorbent polymer mass fraction value;

selecting a stranding type, said stranding type having an affiliated absorption capacity value;

determining the mass of an intermixture of a super-absorbent polymer component and a stranding component according to

$$m_{total} = \frac{m_{liq}}{\left\{(1-f_s)C_{stranding} + Ff_s\Phi\left[\left(\frac{1}{R_\phi}\right)^{\frac{1}{f_s^{1.83}+0.07}} - 1\right]^{0.54}\right\}}$$

wherein

m_{total} is a value denoting said intermixture mass having units of mass of dry super-absorbent polymer in addition with mass of dry stranding,
m_{liq} is said value denoting said mass of liquid to be absorbed,
f_s is said super-absorbent polymer mass fraction value,
F is 40.58 with units of mass of liquid per mass of dry super-absorbent polymer,
Φ is said dryness quality value,
R_ϕ is said porosity quality value, and

$C_{stranding}$ is said absorption capacity value having units of mass of liquid per mass of dry stranding;

deriving a value for the mass of said super-absorbent polymer component according to

$$m_{sap} = f_s m_{total}$$

wherein

m_{sap} is said value denoting said super-absorbent polymer component mass;

deriving a value for the mass of said stranding component according to

$$m_{stranding} = (1 - f_s) m_{total}$$

wherein

$m_{stranding}$ is said stranding component mass value;

deriving a calculated centrifuge capacity value according to

$$CRC = \frac{m_{liq} - (1 - f_s) C_{stranding} m_{total}}{\Phi f_s m_{total}}$$

wherein

CRC is said calculated centrifuge capacity value having units of mass of liquid per mass of dry super-absorbent polymer;

selecting a super-absorbent polymer having a measured centrifuge retention capacity value essentially equivalent to said calculated centrifuge retention capacity value;

measuring a quantity of said super-absorbent polymer essentially equivalent to said super-absorbent polymer component mass value to establish a super-absorbent polymer component portion;

measuring a quantity of stranding of said stranding type essentially equivalent to said stranding component mass value to establish a stranding component portion; and

disposing said super-absorbent polymer component portion throughout said stranding component portion to provide said medium.

6. (Currently amended) The method of ~~either of~~ Claim~~s 4 or~~ 5 wherein said intertwined stranding comprises cellulose fluff.

7. (Currently amended) The method of ~~either of~~ Claim~~s 4 or~~ 5 wherein said intertwined stranding comprises a permeable sponge.

8. (Currently amended) The method of ~~either of~~ Claim~~s 4 or~~ 5 wherein said intertwined stranding comprises a fibrous polymer.

9. (Currently amended) The method of ~~either of~~ Claim~~s 4 or~~ 5 wherein said disposing step further comprises the steps of:

positioning a first tissue cover in a pad former;

intermixing said super-absorbent polymer portion and stranding portion to provide said absorption medium;

placing said absorption medium upon said first tissue cover;

positioning a second tissue cover upon said disposed absorption medium; and

heating and compressing said first tissue, said second tissue, and said disposed absorption medium to a predefined thickness.

Claims 10-14 (Cancelled)